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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,806	02/23/2004	Jan Roelof van der Meulen	1203.080	5460

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EXAMINER

QIN, JIANCHUN

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/782,806

Applicant(s)

MEULEN, JAN ROELOF VAN DER

Examiner

Jianchun Qin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by by Kuijpers (3,595,119).

With respect to claim 1:

Kuijpers discloses a percussion musical instrument comprising: a set of clave blocks (Abstract) comprising a ridge body made of a solid material (6, the body of a xylophonelike sound producing unit is inherently made of a solid material being known in the art), said body having an open cavity therewithin defined solely by said material (11-15); said bodies having substantially equal exterior dimensions and different volumes of said open cavities therewithin provided to generate musical tones of a variety of pitches (Abstract; cols. 1-2, lines 70-26; col. 2, lines 59-70).

With respect to claim 8:

The disclosure of Kuijpers further includes: said cavities include openings having different perimeters (Fig. 1; col. 2, lines 8-14, lines 22-26 and lines 59-70).

### ***Claim Rejections - 35 USC § 103***

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuijpers.

Kuijpers discloses the percussion musical instrument that includes the subject matter discussed above except: said set includes three clave blocks including a low pitch clave block provided to generate a low pitch tone, a medium pitch clave block provided to generate a medium pitch tone and a high pitch clave block provided to generate a high pitch tone.

In view of the teaching of Kuijpers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the invention to make three clave blocks corresponding to three different favorable values of pitch tone, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

5. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuijpers in view of Cohen et al. (4,898,061).

With respect to claim 4:

Kuijpers does not mention expressly: said body of at least one of said clave blocks has a mounting ring.

Cohen et al. disclose a clave block (10), including: a rigid body made of a solid material (col. 3, lines 19-25), said body of said clave block has a mounting ring (38).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Cohen et al. into the invention of Kuijpers in order to produce a robust mechanism for mounting the clave block (Cohen et al., col. 3, lines 59-68).

With respect to claims 5-6:

Kuijpers does not mention expressly: said body of each of said clave blocks is made of plastic material; said body of each of said clave blocks is made by injection molding process.

Cohen et al. disclose a clave block (10), including: a rigid body made of a solid material (col. 3, lines 19-25), said body of each of said clave blocks is made of plastic material (col. 2, lines 22-25); said body of each of said clave blocks is made by injection molding process (col. 2, lines 58-59).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Cohen et al. into the invention of Kuijpers in order to provide a cost-effective mechanism for making a plurality of clave blocks for reproducing the sound of a wood block instrument without using wood (col. 2, lines 20-25, lines 58-59).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuijpers in view of Shimoda et al. (4,779,507).

Kuijpers discloses the percussion musical instrument including the subject matter discussed above except: said bodies of different volumes having different thickness of said solid material.

Shimoda et al. teach a percussive musical instrument such as a wood block, including three plates (21, 22 and 13) of different volumes having different thickness of said solid material, wherein when the plates are struck musical tones of different pitches are generated (cols. 2-3, lines 62-45).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Shimoda et al. into the invention of Kuijpers in order to provide a cost-effective mechanism for making a plurality of clave blocks that can generate musical tones of different pitches (Shimoda et al., col. 3, lines 32-34).

### ***Response to Arguments***

7. Applicant's arguments filed 5/09/06 with respect to claims 1-6 and 8 have been fully considered but they are not persuasive.

Applicant argued that "one of ordinary skill in the musical art would not interpret the xylophone-like unit with the clave block, which does not have the sound plate". This argument is not persuasive. The Examiner's position is that, giving the claims the broadest reasonable interpretation, Kuijpers's teaching does read on the claims of the

instant application. In particular, there is no recitation of a "sound plate" in the claims. The rigid bodies (element 6 for assemblies 1, 2, 3, 4 and 5) taught by Kuijpers do provide the structures and functionalities acoustically sufficient for generating musical tones of a variety of pitches. The rejections stand.

Applicant further argued that the rigid bodies of Kuijpers "have all of the same the same structural size", in other words, "have substantially equal not only exterior dimensions, but also interior dimensions, including a volume of the cavity within the resonators"; therefore, "contrary to the present invention, the musical pitch (or tone) of the resonators of Kuijpers is not defined by the volume of the cavity within the resonators". This argument is not persuasive. From figure 1 of Kuijpers, it is obvious that the open cavities (11-15) are different from each other in size, shape and volume. The rigid bodies (element 6 of assemblies 1-5) of Kuijpers do have substantially equal exterior dimensions but different volumes of the open cavities which are defined to generate musical tones of a variety of pitches (Kuijpers, Fig. 1; cols. 1-2, lines 70-26 and col. 2, lines 59-70).

Regarding claims 2 and 3, in response to Applicant's argument about the motivation to modify the invention of Kuijpers to limit the number of said assemblies, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958

F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The Examiner further recognizes that the test for obviousness is not whether the features of a second reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, it is deemed that, in view of the teaching of Kuijpers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the invention to make a limited number (e.g. three) of clave blocks in order to make a percussion instrument which is capable of generating musical tones corresponding to a number of different favorable values of pitch tone, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

8. Applicant's arguments with respect to claim 7 have been considered but are moot in view of the new ground(s) of rejection.

Claim 7 is rejected as new prior art references (U.S. Pat. No. 4,779,507 to Shimoda et al.) has been found to teach the claimed invention. Detailed response is given in section 6 as set forth above in this Office Action.



**Contact Information**

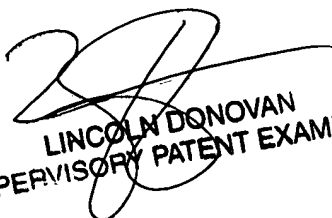
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner  
Art Unit 2837

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